

## ABSTRACT OF THE DISCLOSURE

The present invention relates generally to functional pathway configurations at the interfaces between integrated circuits (ICs) and the circuit assemblies with which the ICs communicate. More particularly, the present invention relates generally to the functional pathway configuration at the interface between a semiconductor chip including an IC (e.g., computer chips like microcontrollers and microprocessors) and the circuitry of a system including the chip. Even more particularly, the present invention relates to a 20-pin microcontroller functional pathway configuration for the interface between the microcontroller and a system in which the microcontroller is embedded.